

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Vinginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/540,676	03/31/2000	Leslie E. Cline	42390.P7299	2061
7:	590 08/14/2003			
Dennis A Nicholls Blakely Sokoloff Taylor & Zafman LLP 12400 Wilshire Boulevard			EXAMINER	
			LEE, CHRISTOPHER E	
7th Floor Los Angeles, CA 90025			ART UNIT	PAPER NUMBER
, -		•	2189	14
			DATE MAILED: 08/14/2003	, /)

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	09/540,676	CLINE, LESLIE E.			
Office Action Summary	Examiner	Art Unit			
	Christopher E. Lee	2189			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status					
1) Responsive to communication(s) filed on	Responsive to communication(s) filed on 28 July 2003.				
2a)⊠ This action is FINAL . 2b)□	This action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims					
4)⊠ Claim(s) <u>1,3-5,7-15 and 17-21</u> is/are pending in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1,3-5,7-15 and 17-21</u> is/are rejected.					
7) ☐ Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or election requirement.					
Application Papers					
9) The specification is objected to by the Examiner.					
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.					
If approved, corrected drawings are required in reply to this Office action.					
12)☐ The oath or declaration is objected to by the Examiner.					
Priority under 35 U.S.C. §§ 119 and 120					
13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a) ☐ All b) ☐ Some * c) ☐ None of:					
1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No					
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).					
a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.					
Attachment(s)					
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449) Paper Not	5) Notice of	w Summary (PTO-413) Paper No(s) of Informal Patent Application (PTO-152)			
U.S. Patent and Trademark Office PTO-326 (Rev. 04-01) Offic	e Action Summary	Part of Paper No. 14			

Art Unit: 2189

Page 2

RCE Final Office Action

DETAILED ACTION

Receipt Acknowledgement

Receipt is acknowledged of the Amendment filed on 28th of July, 2003. Claims 1, 7, 8, 10, 15, 18, 1. 19 and 21 have been amended; claims 6 and 22 have been canceled; and no claim has been newly added since the last Office Action was mailed on 24th of March, 2003. Currently, claims 1, 3-5, 7-15 and 17-21 are pending in this application.

Claim Rejections - 35 USC § 103

- The text of those sections of Title 35, U.S. Code not included in this action can be found in a 2. prior Office action.
- Claims 1, 3-5, 7-11, 15 and 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over 3. Huang et al. [US 6,131,134; hereinafter Huang] in view of Rafferty et al. [US 6,141,719 A; hereinafter Rafferty] and Pollard et al. [US 5,754,870 A; hereinafter Pollard].

Referring to claim 1, Huang discloses a method, comprising: providing a first resistor (pull-up resistor 340 of Fig. 3) with a first end (i.e., the end coupled to switch 330 in Fig. 3) and a second end (i.e., the end coupled to D+ in Fig. 3), said first end coupled to a switch (i.e., switch 330 of Fig. 3) and said second end coupled to a data bus wire (i.e., USB interface D+ of Fig. 3) at a near of a data bus (i.e., detach control signal wire from converting circuit 310 to switch 330 and data lines D+ and D-, which are located within USB converter 120 in Fig. 3); controlling (i.e., opening or closing) said switch with a detach control signal (i.e., switch controlling signal from converting circuit 310 to switch 330 in Fig. 3) sent on a detach control signal wire (i.e., detach control signal wire) separate from data transmission wires (i.e., data lines D+ and D-) of said data bus (i.e., detach control signal wire and data lines D+, D-) to cause an apparatus (i.e., USB converter 120 of Fig. 3) containing said first resistor (i.e., resistor 340 of Fig. 3) and said switch (i.e., switch 330 of Fig. 3) to enter a logically detached state (See col. 6, lines 27-30 and 50-67; i.e., in fact, even if said apparatus is physically connected (i.e., physically attached), the

open switch (e.g., no voltage is supplied to D+) makes said apparatus set said logically detached state); and switching (i.e., open or close said switch in Fig. 3) a biasing voltage (i.e., 3.3V in Fig. 3) from said resistor (i.e., resistor 340 of Fig. 3) utilizing said switch (i.e., switch 330 of Fig. 3).

Huang does not teach said logically detaching control signal (e.g., switch controlling signal for simulating removal of USB device) sent from a far end of said data bus.

Rafferty discloses a USB selector switch, wherein a logically detaching control signal (e.g., switch controlling signal for simulating removal of USB device; See Fig. 4 and col. 3, lines 13-29) is sent from a far end (i.e., from a corresponding peripheral module; See col. 3, lines 26-28) of a data bus (i.e., bus 14 of Fig. 3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have received a logically detaching control signal from a far end of a data bus, as disclosed by Rafferty, in said apparatus, as disclosed by Huang, for the advantage of simulating insertion and removal (i.e., logically attaching and detaching) of said apparatus (i.e., USB device) by a corresponding far end device (i.e., a corresponding peripheral device; See Rafferty, col. 1, lines 50-58).

Huang, as modified by Rafferty, does not teach influencing said detach control signal with a wake-up signal sent on a wake-up signal wire separate from said data transmission wires of said data bus from said near end of said data bus to said far end of said data bus.

Pollard discloses a power management of a computer plug-in card having a remote data link 20 (Fig. 2), wherein influencing a detach control signal (i.e., command output 52 of Fig. 2) with a wake-up signal (i.e., 'link operable' signal 58 in Fig. 2) sent on a wake-up signal wire (i.e., status signal line 62 of Fig. 2) separate from a data transmission wires of a data bus (i.e., power source line 36 of Fig. 2) from a near end of said data bus (i.e., side of switch 46 in Fig. 2) to a far end of said data bus (i.e., side of host computer in Fig. 2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included said wake-up signal wire, as disclosed by Pollard, in said apparatus, as disclosed by Huang, as modified by Rafferty, so as said switch (i.e., power connect switch) to operate responsive to said wake-up signal (i.e., status signal) indicating the operability of said near end of said data bus (i.e., a status monitor indicative of the operability of the remote data link capability) from said near end (i.e., power-consuming elements on the card) to said far end (i.e., power source in the computer), which is disclosed at Pollard, col. 2, lines 43-48).

Referring to claim 3, Huang discloses said first resistor is configured as a pull-up resistor (pull-up resistor 340 of Fig. 3).

Referring to claim 4, Huang discloses detecting said switching of said biasing voltage (See col. 6, lines 30-35).

Referring to claim 5, Huang discloses determining a logically detached state responsive to said detecting (See col. 6, lines 28-30).

Referring to claim 8, Huang discloses an apparatus (i.e., USB converter 120 of Fig. 3), comprising: a first resistor with a first end and a second end (i.e., pull-up resistor 340 of Fig. 3); a switch (i.e., switch 330 of Fig. 3) coupled to said first end of said first resistor and a bias voltage (i.e., 3.3V in Fig. 3); a detach control signal wire (i.e., switch controlling signal arrow from converting circuit 310 to switch 330 in Fig. 3) separate from data transmission wires (i.e., data lines D+ and D-) of said data bus (i.e., detach control signal wire and data lines D+, D-) coupled to said switch at a near end of a data bus (i.e., detach control signal wire from converting circuit 310 to switch 330 and data lines D+ and D-, which are located within USB converter 120 in Fig. 3), to receive a detach control signal (i.e., switch controlling signal from converting circuit 310 to switch 330 in Fig. 3) to cause said apparatus (i.e., USB converter) to enter a logically detached state (See col. 6, lines 27-30 and 50-67; i.e., in fact, even if said apparatus is physically connected (i.e., physically attached), the open switch (i.e., no voltage is supplied

to D+) makes said apparatus set said logically detached state); and a data bus wire (i.e., USB interface D+ of Fig. 3) of said data bus coupled to said second end of said first resistor (See Fig. 3).

Huang does not teach said logically detaching control signal (e.g., switch controlling signal for simulating removal of USB device) sent from a far end of said data bus.

Rafferty discloses a USB selector switch, wherein a logically detaching control signal (e.g., switch controlling signal for simulating removal of USB device; See Fig. 4 and col. 3, lines 13-29) is sent from a far end (i.e., from a corresponding peripheral module; See col. 3, lines 26-28) of a data bus (i.e., bus 14 of Fig. 3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have received a logically detaching control signal from a far end of a data bus, as disclosed by Rafferty, in said apparatus, as disclosed by Huang, for the advantage of simulating insertion and removal (i.e., logically attaching and detaching) of said apparatus (i.e., USB device) by a corresponding far end device (i.e., a corresponding peripheral device; See Rafferty, col. 1, lines 50-58).

Huang, as modified by Rafferty, does not teach a wake-up signal wire separate from said data transmission wires of said data bus to send a wake-up signal from said near end of said data bus to said far end of said data bus to influence said detach control signal.

Pollard discloses a power management of a computer plug-in card having a remote data link 20 (Fig. 2), wherein a wake-up signal wire (i.e., status signal line 62 of Fig. 2) separate from a data transmission wires of a data bus (i.e., power source line 36 of Fig. 2) to send a wake-up signal (i.e., 'link operable' signal 58 in Fig. 2) from a near end of said data bus (i.e., side of switch 46 in Fig. 2) to a far end of said data bus (i.e., side of host computer in Fig. 2) to influence a detach control signal (i.e., command output 52 of Fig. 2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included said wake-up signal wire, as disclosed by Pollard, in said apparatus, as disclosed

Page 6

Art Unit: 2189

RCE Final Office Action

by Huang, as modified by Rafferty, so as to receive said wake-up signal from said near end (i.e., status signal of said near end) to said far end (i.e., informing to said far end for generating said detach control signal), so as said switch (i.e., power connect switch) to operate responsive to said wake-up signal (i.e., status signal) indicating the operability of said near end of said data bus (i.e., a status monitor indicative of the operability of the remote data link capability) from said near end (i.e., power-consuming elements on the card) to said far end (i.e., power source in the computer), which is disclosed at Pollard, col. 2, lines 43-48).

Referring to claim 9, Huang discloses said switch may apply said bias voltage to said first end of said first resistor responsively to a detach control signal (i.e., switch controlling signal from converting circuit 310 in Fig. 3) on said detach control signal wire (See col.6, lines 23-27).

Referring to claim 11, Huang discloses said data bus carries universal serial bus data (i.e., USB interface D+ of Fig. 3).

Referring to claim 15, Huang discloses an apparatus (i.e., USB converter 120 of Fig. 3), comprising: means for providing a first resistor with a first end and a second end (i.e., pull-up resistor 340 of Fig. 3) coupled to a switch (i.e., switch 330 of Fig. 3) and said second end coupled to a data bus wire (i.e., USB interface D+ of Fig. 3) at a near end of a data bus (i.e., detach control signal wire from converting circuit 310 to switch 330 and data lines D+ and D-, which are located within USB converter 120 in Fig. 3); means for controlling said switch with a detach control signal (i.e., switch controlling signal from converting circuit 310 in Fig. 3) on a detach control signal wire (i.e., detach control signal wire) separate from data transmission wires (i.e., data lines D+ and D-) of said data bus (i.e., detach control signal wire and data lines D+, D-) to cause said apparatus (USB converter 120 of Fig. 3) to enter a logically detached state (See col. 6, lines 27-30 and 50-67; i.e., in fact, even if said apparatus is physically connected (i.e., physically attached), the open switch (e.g., no voltage is supplied to D+) makes said

apparatus set said logically detached state); and means for switching a biasing voltage from said resistor utilizing said switch (See col. 6, lines 23-27).

Huang does not teach said logically detaching control signal (e.g., switch controlling signal for simulating removal of USB device) sent from a far end of said data bus.

Rafferty discloses a USB selector switch, wherein a logically detaching control signal (e.g., switch controlling signal for simulating removal of USB device; See Fig. 4 and col. 3, lines 13-29) is sent from a far end (i.e., from a corresponding peripheral module; See col. 3, lines 26-28) of a data bus (i.e., bus 14 of Fig. 3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have received a logically detaching control signal from a far end of a data bus, as disclosed by Rafferty, in said apparatus, as disclosed by Huang, for the advantage of simulating insertion and removal (i.e., logically attaching and detaching) of said apparatus (i.e., USB device) by a corresponding far end device (i.e., a corresponding peripheral device; See Rafferty, col. 1, lines 50-58).

Huang, as modified by Rafferty, does not teach means for influencing said detach control signal with a wake-up signal sent on a wake-up signal wire separate from said data transmission wires of said data bus from said near end of said data bus to said far end of said data bus.

Pollard discloses a power management of a computer plug-in card having a remote data link 20 (Fig. 2), wherein means for influencing a detach control signal (i.e., command output 52 of Fig. 2) with a wake-up signal (i.e., 'link operable' signal 58 in Fig. 2) sent on a wake-up signal wire (i.e., status signal line 62 of Fig. 2) separate from a data transmission wires of a data bus (i.e., power source line 36 of Fig. 2) from a near end of said data bus (i.e., side of switch 46 in Fig. 2) to a far end of said data bus (i.e., side of host computer in Fig. 2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included said wake-up signal wire, as disclosed by Pollard, in said apparatus, as disclosed

RCE Final Office Action

Art Unit: 2189

by Huang, as modified by Rafferty, so as to receive said wake-up signal from said near end (i.e., status signal of said near end) to said far end (i.e., informing to said far end for generating said detach control signal), so as said switch (i.e., power connect switch) to operate responsive to said wake-up signal (i.e., status signal) indicating the operability of said near end of said data bus (i.e., a status monitor indicative of the operability of the remote data link capability) from said near end (i.e., power-consuming elements on the card) to said far end (i.e., power source in the computer), which is disclosed at Pollard, col. 2, lines 43-48).

Referring to claim 17, Huang discloses said apparatus of claim 15, further comprising means for detecting said switching of said biasing voltage (See col. 6, lines 30-35).

Referring to claim 19, Huang discloses a system, comprising: a data bus (i.e., USB interface in Fig. 1 and 2) with a near end (i.e., side of USB converter 120 in Fig. 1) and a far end (i.e., side of computer system 110 in Fig. 1); a first circuit (i.e., USB converter 120 of Fig. 1), coupled to said near end (See Fig. 1), including a first resistor with a first end and a second end (i.e., pull-up resistor 340 of Fig. 3), a switch (i.e., switch 330 of Fig. 3) coupled to said first end of said first resistor and to a bias voltage (i.e., 3.3V in Fig. 3), a data bus wire (i.e., USB interface D+ of Fig. 3) of said data bus coupled to said second end of said first resistor (See Fig. 3), a detach control signal wire (i.e., switch controlling signal arrow from converting circuit 310 to switch 330 in Fig. 3) separate from data transmission wires (i.e., data lines D+ and D-) of said data bus (i.e., detach control signal wire and data lines D+, D-) coupled to said switch to receive a detach control signal (i.e., switch controlling signal) to cause said first circuit (i.e., USB converter) to enter a logically detached state (See col. 6, lines 27-30 and 50-67; i.e., in fact, even if said apparatus is physically connected (i.e., physically attached), the open switch (i.e., no voltage is supplied to D+) makes said first circuit set said logically detached state); and a second circuit (computer system 110 of Fig. 1), coupled to said far end (See Fig. 1).

Application/Control Number: 09/540,676

Art Unit: 2189

RCE Final Office Action

Huang does not teach said logically detaching control signal (e.g., switch controlling signal for simulating removal of USB device) sent from a far end of said data bus to said near end of said data bus.

Rafferty discloses a USB selector switch, wherein a logically detaching control signal (e.g., switch controlling signal for simulating removal of USB device; See Fig. 4 and col. 3, lines 13-29) is sent from a far end (i.e., from a corresponding peripheral module) of a data bus (i.e., bus 14 of Fig. 3) to a near end (i.e., downstream module 16 of Fig. 4) of said data bus (See col. 3, lines 26-28).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have received a logically detaching control signal from a far end of a data bus, as disclosed by Rafferty, in said first circuit, as disclosed by Huang, for the advantage of simulating insertion and removal (i.e., logically attaching and detaching) of said apparatus (i.e., USB device) by a corresponding far end device (i.e., a corresponding peripheral device; See Rafferty, col. 1, lines 50-58).

Huang, as modified by Rafferty, does not teach a wake-up control signal wire separate from said data transmission wires of said data bus to send a wake-up signal from said near end of said data bus to said far end of said data bus; and said second circuit to send said detach control signal responsive to said wake-up signal.

Pollard discloses a power management of a computer plug-in card having a remote data link 20 (Fig. 2), wherein a wake-up control signal wire (i.e., status signal line 62 of Fig. 2) separate from a data transmission wires of a data bus (i.e., power source line 36 of Fig. 2) to send a wake-up signal (i.e., 'link operable' signal 58 in Fig. 2) from a near end of said data bus (i.e., side of switch 46 in Fig. 2) to a far end of said data bus (i.e., side of host computer in Fig. 2); and a second circuit (i.e., power source 24 in the computer of Fig. 2) to send a detach control signal (i.e., command output 52 of Fig. 2) responsive to said wake-up signal (i.e., 'link operable' signal from plug-in card 30 of Fig. 2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included said wake-up signal wire, as disclosed by Pollard, in said apparatus, as disclosed by Huang, as modified by Rafferty, so as to receive said wake-up signal from said near end (i.e., status signal of said near end) to said far end (i.e., informing to said far end for generating said detach control signal), so as said switch (i.e., power connect switch) to operate responsive to said wake-up signal (i.e., status signal) indicating the operability of said near end of said data bus (i.e., a status monitor indicative of the operability of the remote data link capability) from said near end (i.e., power-consuming elements on the card) to said far end (i.e., power source in the computer), which is disclosed at Pollard, col. 2, lines 43-48).

Referring to claim 20, Huang discloses said switch (switch 330 of Fig. 3) may apply said bias voltage (3.3V in Fig. 3) to said first end of said first resistor responsively to said detach control signal (switch controlling signal from converting circuit 310 in Fig. 3). Refer to col.6, lines 23-27.

Referring to claims 7, 10, 18 and 21, Huang discloses said detach control signal (i.e., switch controlling signal) is asserted (i.e., state of switch controlling signal which causes switch 330 to be closed) when said wake-up signal (i.e., converted signal from the signals transferred between non-PnP interface and USB interface) is de-asserted (i.e., state of the converted signal which ultimately causes switch 330 to be closed).

4. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Huang [US 6,131,134] in view of Rafferty [US 6,141,719 A] and Pollard [US 5,754,870 A] as applied to claims 1, 3-5, 7-11, 15 and 17-21 above, and further in view of Decuir [US 5,781,028].

Referring to claim 12, Huang, as modified by Rafferty and Pollard, discloses all the limitations of claim 12 except that does not teach said data bus carries IEEE-1394 bus data.

Decuir teaches a conventional bi-directional transmission line using an IEEE 1394 standard (Fig. 4), wherein said data bus (transmission line 51 of Fig. 4) carries IEEE-1394 bus data (See col. 2, lines 23-25). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have applied said data bus wire, as disclosed by Decuir, to said data bus wire of said apparatus,

as disclosed by Huang, as modified by Rafferty and Pollard, for the advantage of a high speed of data transmission, which is well know to one of ordinary skill in the art at the time the invention was made.

5. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang [US 6,131,134] in view of Rafferty [US 6,141,719 A] and Pollard [US 5,754,870 A] as applied to claim 1, 3-5, 7-11, 15 and 17-21 above, and further in view of Takasu [JP 407058800 A].

Referring to claim 13, Huang, as modified by Rafferty and Pollard, discloses all the limitations of claim 13 except that does not teach a second resistor with a first end and a second end.

Takasu teaches a second resistor (terminating register R₂ of Fig. 1) with a first end and a second end, said first end coupled to said data bus wire (transmission line 9 of Fig. 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included said second resistor, as disclosed by Takasu, in said apparatus, as disclosed by Huang, as modified by Rafferty and Pollard, so as to provide effective termination on said bus, which is well know to one of ordinary skill in the art at the time the invention was made.

Referring to claim 14, Takasu discloses said second end of said second resistor is coupled to signal ground (R₂ of Fig. 1 as a pull-down resistor; See col. 4, lines 30-31).

Response to Arguments

6. Applicant's arguments filed on 28th of July, 2003 have been fully considered but they are not persuasive.

In response to the Applicant's argument with respect to "Applicant submits that the special data bus 14 of Rafferty Figure 3 is not the same as the data bus shown between 'downstream' (far end) device 22 and 'upstream' (near end) device 16. As Rafferty discloses two separate data busses, applicant submits that any such signaling cannot be the 'detach control signal sent from a far end of said data bus' to the switch at the near end of the data bus" on Response pages 8, 10, 12 and 13, the Examiner believes that the Applicant misinterprets the claim rejection. The Applicant essentially argues that Rafferty does not teach

the subject matter "detach control signal" is sent from a far end of the data bus to the near end of the data bus. The Applicant claims the subject matter "switch" is at a near end of a data bus (i.e., the end of the bus, at where the switch is located, is the near end), and the subject matter "a detach control signal" is sent from a far end (i.e., the opposite end of the near end) of the data bus (See Claim 1). Rafferty teaches a USB selector switch (i.e., switch 24 and 26 in Fig. 4) is at a near end (i.e., the end of the bus at where the switch is located) of a data bus, and a switch controlling signal for simulating removal of USB device (i.e., a logically detaching control signal) is sent from a corresponding peripheral module (i.e., from a far end) of a data bus, which is disclosed at col. 3, lines 26-28 (See paragraph 3 of the instant office Action, claim rejection under 35 U.S.C. 103(a) as being unpatentable over Huang in view of Rafferty and Pollard). Thus, the Applicant's argument on this point is not persuasive.

7. Applicant's arguments with respect to the claims 1, 3-5, 7-15 and 17-21 have been considered but are most in view of the new ground(s) of rejection.

In response to the Applicant's argument with respect to "influencing said detach control signal with a wake-up signal sent on a wake-up signal wire separate from said data transmission wires of said data bus from said near end of said data bus to said far end of said data bus" in the exemplary claim 1, the Examiner brought Pollard reference in the prior art of record, in the rejection for the limitations which are not provided by Huang and Rafferty and all of the other art cited (See Claim Rejections - 35 USC § 103(a)).

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing

. Application/Control Number: 09/540,676

Art Unit: 2189

RCE Final Office Action

Page 13

date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH

shortened statutory period, then the shortened statutory period will expire on the date the advisory action

is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX

MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should

be directed to Christopher E. Lee whose telephone number is 703-305-5950. The examiner can normally

be reached on 9:00am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark

H. Rinehart can be reached on 703-305-4815. The fax phone numbers for the organization where this

application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7238

for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should

be directed to the receptionist whose telephone number is 703-305-3900.

Christopher E. Lee

Examiner

Art Unit 2189

cel/ August 12, 2003

Primary Patent Examiner Technology Center 2100